compact said mineral insulation material tightly around said end portions of said wires, said metal tube including a closed distal end.

37. The device of claim 36 further comprising a moisture barrier surrounding said end portions of said wires between said mineral insulation material and said flexible insulation material, said metal tube overlying said moisture barrier and being compressed into sealing engagement with said moisture barrier causing said moisture barrier to form a fluid tight seal around said wires.

38. The device of claim 37 wherein said moisture barrier is made of Teflon.

39. The device of claim 37 further comprising strain relief means between said metal tube and said flexible insulation material.

40. The device of claim 39 wherein said strain relief means comprises a flexible plastic tube surrounding said flexible insulation material adjacent said end portions of said wires, said metal tube overlying said flexible plastic tube and being compressed into firm gripping engagement with said flexible plastic tube.

41. The device of claim 40 further comprising a metal overbraid surrounding said flexible insulation material, said metal overbraid being removed from said flexible insulation material adjacent said end portions of said wires, said flexible plastic tube overlying said flexible insulation material adjacent said end portions of said wires and the adjacent end of said metal overbraid, said flexible plastic tube being compressed into firm gripping engagement with said flexible insulation material and said metal overbraid by said metal tube.

42. The device of claim 36 wherein said wires are of dissimilar metals and said temperature sensing means includes means joining said end portions of said wires together.

43. The device of claim 36 wherein said temperature sensing means includes a resistance temperature detector electrically connected to said end portions of said wires.

44. The device of claim 36 wherein said temperature sensing means includes a thermistor electrically connected to said end portions of said wires.

45. The device of claim 36 wherein said temperature sensing means includes a sensor element electrically connected to said end portions of said wires, and said metal tube includes an end portion surrounding said sensor element having an internal size which is less than the initial internal size of said metal tube and which is the same as the internal size of said metal tube after the remaining length of said metal tube has been compressed to a smaller diameter.

46. The device of claim 45 wherein said end portion of said metal tube has an internal shoulder which bears against an end of said preformed cylinder member prior to compressing the remaining length of said metal tube to a smaller diameter.

47. The device of claim 46 wherein said sensor element has a pair of leads that are inserted into said passages in said cylindrical member along with said end portions of said wires prior to compressing the remaining length of said metal tube to a smaller diameter, whereby during such compression, the compaction of said mineral insulation material around said wires ensures good electrical contact between said wires and said leads.

48. The device of claim 45 wherein said end portion of said metal tube is packed with additional mineral insulation material around said sensor element.

49. The device of claim 48 wherein said distal end of said metal tube is welded closed.

50. The device of claim 36 wherein said wires are stranded flexible wires.

END

REMARKS

The Examiner's approval of the proposed drawing correction filed on July 3, 1989, is noted. New formal drawings including such proposed drawing correction will be submitted upon allowance of the application.

All of the elected claims 1-15 and 28-35 stand rejected as being unpatentable over Frazier and/or Stevens taken alone or in combination with Bargen, Korton or Clawson et al. Accordingly, by the present amendment, all of the elected claims have been cancelled and a new set of claims 36-50 has been substituted therefor which clearly patentably distinguish over the cited references, as will be made readily apparent from the discussion which follows.